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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,653	01/18/2002	William Ho Chang	FLEX 2399	4776

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EXAMINER

LETT, THOMAS J

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/053,653

Applicant(s)

CHANG ET AL.

Examiner

Thomas J. Lett

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-16, and 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Buckley et al (USPN 6,798,530 B1).

With respect to claim 1, Buckley et al disclose an output controller (processor 120 of Fig. 1, col. 7, lines 1-6) for processing intermediate output data that includes image data and has a first bit depth and resolution, the image data corresponding to content that includes at least part of a text or graphics information, the controller comprising:

means for retrieving the image data (printer driver memory portion 124 retrieves the currently opened document, col. 7, lines 9-14) from the intermediate output data (data from input device 150 via link 152, see Fig. 1), and

means (graphical user interface 10 of image editing application of Fig. 2) for carrying out an image processing operation on the data, said image processing operation adjusting at least one of bit depth (see "Quad Dot" selection of Fig. 2), color space (see gamut settings portion 530 of Fig. 4) and a combination of resolution and

Art Unit: 2626

output size of an image represented by the data (virtual printer definition 430 includes various settings such as the graphic resolution and paper size 450, col. 7, lines 35-46, and see Fig. 3).

With respect to claim 2, Buckley et al disclose a controller further comprising means for receiving the intermediate output data via a short-range wireless communication channel (each of the links of the system may be a wireless connection. col. 3, lines 45-49).

With respect to claim 3, Buckley et al disclose a controller in which the image data includes mixed raster content encoding, and the means for retrieving the image data from the intermediate output data comprises means for generating an output image data from at least part of the mixed raster content data (data of mixed raster content is processed, col. 9, lines 26-36).

With respect to claim 4, Buckley et al disclose a controller in which the means for carrying out image processing operations on the data, includes means for carrying out one or more of a color correction operation (halftone color adjustment 442), a color matching operation, a color management operation (color settings portion 520), a scaling operation (gray scale color rendering option 526), an interpolation operation, a color space conversion (see gamut settings portion 530 of Fig. 4), a decompression (decomposing mixed raster content, col. 9, lines 26-36), a decryption, and a halftoning operation (continuous tone halftone rendering option 512).

With respect to claim 5, Buckley et al disclose a controller of claim 1 in which the first bit depth and resolution correspond to a predefined standard value included in the controller (default rendering can be used, col. 8, lines 7-13).

With respect to claim 6, Buckley et al disclose a controller of claim 1 in which the means for carrying out an image processing operation on the data adjusts at least one of bit depth, color space, and a combination of output size and resolution to a value corresponding to a specific input requirement of an output engine (default rendering can be used, col. 8, lines 7-13).

With respect to claim 7, Buckley et al disclose a controller of claim 1 in which the output controller is included in the output device (the devices shown in Fig. 2 can be separate or constructed as one integrated device, col. 6, lines 4-9).

With respect to claim 8, Buckley et al disclose a controller of claim 1 in which the output controller is included in one of a server, an external station, a board, a card, and a data access point (the devices shown in Fig. 2 can be separate or constructed as one integrated device, col. 6, lines 4-9).

With respect to claim 9, Buckley et al disclose a controller of claim 1, further comprising means for storing one or more output device profiles (a default rendering profile can be used for any virtual printer, col. 8, lines 10-13).

With respect to claim 10, Buckley et al disclose an output controller method for processing intermediate output data that includes image data and having a first bit depth and resolution, the image data corresponding to content that includes at least part of a text or graphics information, the method comprising:

retrieving the image data from the intermediate output data (using graphical user interface 10 of image editing application of Fig. 2), and

carrying out an image processing operation on the data, said image processing operation adjusting at least one of bit depth (see "Quad Dot" selection of Fig. 2), color space (see gamut settings portion 530 of Fig. 4) and a combination of resolution and output size of an image represented by the data (virtual printer definition 430 includes various settings such as the graphic resolution and paper size 450, col. 7, lines 35-46, and see Fig. 3).

With respect to claim 11, Buckley et al disclose a controller method of claim 10 further comprising receiving the intermediate output data via a short-range wireless communication channel (each of the links of the system may be a wireless connection. col. 3, lines 45-49).

With respect to claim 12, Buckley et al disclose a controller method of claim 10 in which the image data includes data encoded with mixed raster content (data of mixed raster content is processed, col. 9, lines 26-36).

With respect to claim 13, Buckley et al disclose a controller method of claim 10 wherein the step of carrying out an image processing operation on the data, includes carrying out one or more of a color correction operation, a color matching operation, a color management operation, a scaling operation, an interpolation operation, a color space conversion, a halftoning operation, a compression operation, a decompression operation, and a decryption operation.

With respect to claim 14, Buckley et al disclose a computer readable medium, data output controller software for processing intermediate output data that includes image data and has a first bit depth, and resolution, the image data corresponding to content that includes text or graphics information, the controller software comprising: software for retrieving the image data from the intermediate output data, and software for carrying out an image processing operation on the data, said image processing operation adjusting at least one of bit depth, color space and a combination of resolution and output size of an image represented by the data.

With respect to claim 15, Buckley et al disclose a medium of claim 14 further comprising software for establishing a short-range wireless communicating channel with an information apparatus (each of the links of the system may be a wireless connection. col. 3, lines 45-49).

With respect to claim 16, Buckley et al disclose a medium of claim 15 further comprising software for providing an output device profile over the communication channel (a default rendering profile can be used for any virtual printer, col. 8, lines 10-13).

With respect to claim 18, Buckley et al disclose a medium of claim 14 wherein the software includes software for retrieving the image data from data encoded with mixed raster content (data of mixed raster content is processed, col. 9, lines 26-36).

With respect to claim 19, Buckley et al disclose a medium of claim 14 wherein the software for carrying out an image processing operation on the data includes software for carrying out one or more of a color correction operation (halftone color

Art Unit: 2626

adjustment 442), a color matching operation, a color management operation (color settings portion 520), a scaling operation (gray scale color rendering option 526), an interpolation operation, a color space conversion (see gamut settings portion 530 of Fig. 4), a decompression (decomposing mixed raster content, col. 9, lines 26-36), a decryption, and a halftoning operation (continuous tone halftone rendering option 512).

With respect to claim 20, Buckley et al disclose a medium of claim 14 in which the first bit depth and resolution correspond to respective values that are included in said software for retrieving image data and carrying out image processing operations (default rendering can be used, col. 8, lines 7-13).

With respect to claim 21, Buckley et al disclose a medium of claim 14 in which the output controller software is included in a server, an external station, a board, and a data access point (the devices shown in Fig. 2 can be separate or constructed as one integrated device, col. 6, lines 4-9).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buckley et al (USPN 6,798,530 B1) in view of Hitachi Koki Imaging Solutions, Inc. (HiKIS) (Office

Art Unit: 2626

World News, "i-copiers and i-printers give dealers the right connections", Ft.

Lauderdale: Oct 2000. Vol. 28, Issue 10; p. 30).

Buckley et al does not disclose expressly a medium of claim 14 further comprising software for calculating and collecting payment information as compensation for rendering of the content by the output device. HiKIS discloses a network printer that uses a billing module "I-billing" for calculating and billing for customers of the image processing system. Buckley et al and HiKIS are analogous art because they are from the similar problem solving area of customer billing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the software billing feature of HiKIS to the system of Buckley et al in order to obtain software to bill customers using image output devices. The motivation for doing so would be to effectively bill customers.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lin et al (USPN 6,941,014 B2) disclose obtaining image data and generating mixed raster content data and outputting the data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Lett whose telephone number is (571)272-7464. The examiner can normally be reached on 7-3:30pm.

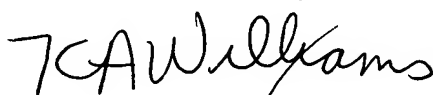
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on (571)272-7471. The fax phone

Art Unit: 2626

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJL



KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER